one cell at a time, avoiding any shock to the patient. 10. Before operating, the susceptibility of the patient to the electric current should be ascertained. 11. The problem is to absorb the stricture, not to cauterize. burn, or destroy tissues. 12. *Weak currents at long intervals.* 13. In most cases a current of six cells, or from $2^1/_2$ to 5 milliampères, will do the work, but it must be regulated according to the work to be done. 14. The séances should be at intervals, not too frequently in succession. 15. The best position for the patient to assume during the operation is that which is most comfortable for himself and the operator. I prefer the erect posture, but the recumbent or others may be used. 16. Anæsthetics I like to avoid; I want the patient conscious so that he can tell how he feels. 17. Force should never be used; the bougie must be guided in the most gentle way; the electricity alone must be allowed to do the work. 18. During one séance, two electrodes in succession should never be used. 19. All strictures are amenable to treatment by electrolysis. 20. Pain should never be inflicted by the use of electrolysis; therefore it should not be applied when the urethra is in an acute or even subacute inflammatory condition, In conclusion, he remarks that in every case that is intelligently and judiciously undertaken, success must and will follow. In the strictest sense of the word there can be no failure in dissolving away the dense tissue that constitutes a stricture, for electrolysis is based upon a fixed chemical action of the constant current on these animal tissues. Electrolysis cannot fail, but operators may and do.—*N. Y. Med. Rec.* Sept. 25, 1886.

J. E. PILCHER (U. S. Army).

WOUNDS—INJURIES—ACCIDENTS.

I. Severe Injury from Dynamite. Amputation of Forearm. Ligature of Femoral Artery. Gangrene of Leg. Amputation of Thigh. Pyæmia. Severe Reactionary Hæmorrhage. Transfusion of Blood Four Times. Recovery. By Messrs. ANNANDALE and J. M. COTTERILL. J. P., æt. 23, a quarryman, was admitted on January 8, 1886, suffering from the results of the explosion of some dynamite cartridges. The proper apparatus for the purpose being out of order, the patient had been warming some of the explosive in an ordinary iron kettle at a "chaffer," when the dynamite exploded. The left hand was completely shattered, and the forearm badly lacerated by the pieces of metal; the posterior aspect of the left thigh was deeply gashed in all directions, the fragments of metal splintering the lower end of the femur, and lying in great quantity among the deep structures of the thigh. The right hand and leg were also severely injured, but to a less extent than the left. Five hours after the accident the hand was removed by Mr. Cotterill by a modified circular amputation above the wrist, and large pieces of the kettle were extracted from the tissues of the forearm and thigh. Amputation of thigh was out of the question, owing to the extreme weakness of the patient, caused by the loss of blood and the shock. Chloroform sickness which supervened after the operation was subdued by a few fifteen drop doses of a 20% solution of cocaine.

The wound of the thigh having sloughed extensively, on January 10. Mr. Annandale tied the femoral artery at the apex of Scarpa's triangle so as to lessen the risk of secondary hæmorrhage. Three days afterwards signs of gangrene appeared in the calf of the left leg. The temperature ran up to 107° F. in the evening, and the patient became delirious. On the following day the gangrene having spread to the knee, amputation through the upper third of the thigh was performed. On January 15, at 1 A. M., a very profuse reactionary hæmorrhage, from a branch of the profunda artery having taken place, the patient was transfused by Dr. Darling, the blood being given by Dr. Thomson. Four ounces of blood were injected, together with two ounces of solution of phosphate of soda, and the condition of the patient at once began to improve. The patient being still very weak, and at times delirious, Mr. Annandale performed transfusion at midday, injecting six ounces of blood with two ounces of saline solution. Marked improvement again followed. On January 16 symptoms of septic absorption being present and the patient profoundly weak, transfusion, to the extent of six ounces of blood and two of the saline solution was again performed. The great improvement which followed was maintained for thirty-six hours; but on January 18 there was a falling off, and transfusion was practiced for the fourth time. Seven ounces of blood and two of the saline solution were injected. About half an hour after the operation the patient had a rigor, and the temperature rose to 106°, but it rapidly fell to 99.2°, and the corpuscles were found in the evening to have increased by 250,000 per cubic millimetre since the morning. From this period convalescence slowly began. Several large pyæmic abscesses formed, and were opened in various parts of the body. The patient was discharged in very good health on April 9.

The author considers that the operation of transfusion is destined to hold a far more prominent position than it has hitherto done, owing to the fact that the method of application has been simplified and perfected. It is somewhat remarkable that the use of the saline solution, introduced by Dr. B. Hick in 1878, has not come into more general use, as it certainly deprives the operation, as usually performed, of most of its difficulties and dangers.

The author first employed it in Edinburgh about two years ago in a case of severe hæmorrhage from gastric ulcer, and was struck with the ease and safety of the method. The steps of the operation will be found recorded in the *British Medical Journal* of April 10, 1886. P. 697, to which description he wishes to add that the blood should not take more than five or six minutes to inject, though it does not coagulate before twenty minutes at least in the majority of cases; and that this operation, like all others, should be done with such antiseptic precautions as commend themselves to the common sense of the operator. —*British Med. Jour.*, Oct. 2, 1886.

H. PERCY DUNN (London).

GYNÆCOLOGICAL.

I. Subserous Papillary Cystomata of the Ovary; two Cases, the one being a Tubo-Ovarian Cyst. Ovariotomy in both Cases followed by Recovery. In one Case for Internal Strangulation Laparotomy four Months later. Recovery. By Dr. F. LANGE (New York). Both of these cases had this in common, that the tumour was of moderate size, situated on the right side, and rested with broad base between the layers of the broad